## MEDICARE PAYMENT ADVISORY COMMISSION

## PUBLIC MEETING

Ronald Reagan Building
International Trade Center
Horizon Ballroom
1300 13th Street, N.W.
Washington, D.C.

Thursday, October 10, 2002 10:18 a.m.

## COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair ROBERT D. REISCHAUER, Ph.D., Vice Chair SHEILA P. BURKE AUTRY O.V. "PETE" DeBUSK NANCY ANN DePARLE DAVID DURENBERGER ALLEN FEEZOR RALPH W. MULLER ALAN R. NELSON, M.D. JOSEPH P. NEWHOUSE, Ph.D. CAROL RAPHAEL ALICE ROSENBLATT JOHN W. ROWE, M.D. DAVID A. SMITH MARY K. WAKEFIELD, Ph.D. NICHOLAS J. WOLTER, M.D.

## AGENDA ITEM: Characteristics of hospitals by Medicare financial performance -- Jack Ashby

MR. ASHBY: As Glenn says, this session is to go over the results of the first phase of the initiative we've undertaken to learn more about why some hospitals seem to fare extremely well under Medicare inpatient PPS and some do quite poorly.

By way of some background, this first chart replicates data that we presented in our March report focusing for the moment on the solid line which is our full inpatient margin and excludes critical access hospitals, by the way. We can see that there is quite wide variation in financial performance in this PPS. We have a 10th percentile of minus 14 percent and a 90th percentile of 27 percent.

When we first presented these data last winter, you basically asked us to attempt to determine why we see a distribution that is this wide. And as we say, this is our first go at attempting to answer that question.

MR. HACKBARTH: Jack, can I ask a question before you go further. I know all of this analysis is done using the inpatient margin. My recollection is that we see the same sort of distribution if we use overall Medicare margin; is that right?

MR. ASHBY: Yes, we would see basically the same picture. The whole scale would be moved downward a bit, but you'd see the same basic pattern on the overall Medicare margin.

DR. ROWE: And the overall margin as well or just Medicare? MR. ASHBY: The overall margin, there's a wide variation there, too. But the dynamics are considerably different and we may get to looking at that down the line, too.

 $\ensuremath{\mathsf{MR}}.$  HACKBARTH: I was referring to the Medicare margin including outpatient services.

DR. REISCHAUER: Jack, are these weighted by hospital bed size?

MR. ASHBY: No, reflecting your earlier comment this morning, these are not weighted. Each observation is treated as a hospital in this analysis. Every hospital counts in this look at the picture.

But we have known for a long time that hospitals receiving disproportionate share and indirect medical education payments is indeed a predictor of good financial performance. Because there is little relationship between the DSH payments and cost, and because a substantial portion of the IME payments as well, over half of the payments, are beyond the documented impact of teaching costs, we would expect, all else being equal, that hospitals receiving these payments would have higher margins.

And as we see in this next chart, that is indeed the case.

MR. MULLER: You mean higher Medicare margins.

MR. ASHBY: Yes. These again are Medicare inpatient margins.

We see that major teaching hospitals here have margins that are twice those of the other teaching hospitals. And in turn,

those are almost twice the margins of non-teaching. We see the same pattern with the disproportionate share payments. And as you can see at the bottom, there appears to be some interaction between these two payment adjustments as well.

As you can see, hospitals that are major teaching and also receive DSH payments have the highest Medicare margins of any of the standard groups, the 40-odd standard groups that we look at.

MS. BURKE: Jack, I want to make sure I understand. This excludes those costs or includes? The previous chart excludes, as I understand, DSH and IME. This includes DSH and IME.

 $\mbox{MR. ASHBY:}\mbox{ Right, although if we can go back to the previous chart.}$ 

MS. BURKE: The previous one does not. It excludes.

MR. ASHBY: The solid line here includes, that's our starting point, the solid line here. This includes all and this is the distribution you look at.

Then continuing with the includes DSH and IME, you can see that we get this sort of disparity.

DR. ROWE: Can I ask one question since we've got you taking your breath for a second?

The fact that the distribution in the first graph would be roughly the same if you included outpatient as well as inpatient should not be, I believe, construed to be carried through the rest of these data. And that if you included outpatient as well as inpatient margins in this slide, these numbers would be quite different then, wouldn't they?

MR. ASHBY: The outpatient margins differ very little among these groups, so the effect that you see here would be diluted by essentially adding in a constant for the outpatient sector. But the variation you see here would still very much be there, it would just be --

DR. ROWE: Is that right? Because I was under the impression that many of the major teaching hospitals had negative -- had a much less salubrious experience in the outpatient than --

MR. MULLER: Because the weights of in to out are much different in some of these. Right, Jack? You wouldn't say that the in and out weight is the same across all hospitals?

MR. ASHBY: No, it's not. But nonetheless, we can produce that graph.

DR. ROWE: That would be great.

MR. ASHBY: If we did this on the combined inpatient and outpatient, you would still see these very substantial differences that you see here. They would just be somewhat reduced.

DR. ROWE: That might be a more -- with respect to the role of Medicare, I just never have accepted the view of just looking at the inpatient margin. I think we're talking about the hospital, not the inpatient facility, particularly these days since more is done in the outpatient. To see the whole institution data, I think would be very helpful.

MR. HACKBARTH: Jack, why in the first instance did you use the inpatient? Why did you start with the inpatient?

MR. ASHBY: It was kind of a segue to the next point I was

going to make, and that is going back to this graph. When you pull out the DSH and the subsidy portion of the IME, one of the things that you see is that there remains a great deal of variation. The variation is every bit as large. And that speaks to why we wanted to look at this.

I mean, inpatient payments, obviously, in dollars are the lion's share of the system. But what brought us to this study in the first place is the fact that we see such extreme variation here. And while, as you see on that chart we just looked at, IME and DSH obviously explain a great deal of that variation, you take them out of the picture and lo and behold you still have tremendous variation.

That's what we wanted to learn more about. Showing that IME and DSH make a great deal of difference is kind of shooting fish in a barrel basically. We know that. What we don't know, or anywhere near as well, is why when you take away the big guns do we still see tremendous variation? I think it suggests that there are other factors at play or we wouldn't have this same degree of variation on the dotted line.

And of course, it also suggests that the hospitals receiving DSH payments and IME payments themselves vary. You can just deduce that from the fact that you take away from the solid line all the way across distribution. So explaining that remaining variation is what we're about here. Okay?

Now our approach, in doing so, then began as we say by

Now our approach, in doing so, then began as we say by calculating a Medicare inpatient margin that excludes DSH payments and the portion of the IME payments that exceed the teaching cost relationship. Then we divided the hospitals into quintiles, that is five evenly sized groups, defined by this margin. So we now have hospitals that array on margins.

And then we compared those quintiles on various characteristics. And just to finish off this methodological thing, this is what we're looking at with our five groups of hospitals. They range from the lowest, which averages almost minus 19 percent, to the highest, which averages up to 20. And again, back to Bob's points, these are non-weighted averages of margins.

DR. REISCHAUER: Any idea of what fraction of beds were in the lowest and in the highest?

MR. ASHBY: I don't know that right off but you can be sure that the upper range has more beds in it than the bottom range. And we'll see that as we go along.

DR. ROWE: It's interesting that you have such deeply negative numbers in the first quintile, but that none of the categories that you had on one of your preceding slides had negative margins. They all had positives. They had from 23 to some number less than that, but still north of zero.

MR. ASHBY: Right.

DR. ROWE: Which suggests that there's not one subset, at least the way you broke it down, that is hyperconcentrated down in --

MR. ASHBY: Precisely. That's exactly the point we want to get across. There is variation within every one of these groups of hospitals. And that begins right off the bat to tell you

something about the nature of the dynamics here.

We addressed three types of characteristics in this study. First is features of the payment system like the wage index level, for example. If we find differences between high and low margin hospitals on this kind of variable, it might indicate the need for further study to determine whether we ought to change the payment system.

And secondly, we looked at the facility/environmental characteristics that we generally consider beyond management control, at least in the short run. The best example would be urban/rural location. If we see differences in this type of variable it might suggest that such variable might need to be taken into account in designing our payment system.

Then finally we looked at characteristics that are generally within management control, such as cost growth, the rate of cost growth, for example. In this case, of course, we would not want to take this kind of factor into account in designing the payment system, even if it is associated with major differences in performance. This is the kind of thing that hospitals ought to be on their own to influence.

DR. ROWE: So you think that the annual growth in health care cost is within the control of the management of the hospital?

MR. ASHBY: Let me make the --

DR. ROWE: Certainly not any hospital I ever managed, but that was well documented.

[Laughter.]

MR. ASHBY: Let me make the very next sentence. My very next sentence was going to be that among these facility characteristics virtually none of them are entirely exogenous or entirely endogenous. There are always factors that are on both sides. So we sort of put them in camps by what we thought was a predominant influence.

DR. ROWE: You might say management influence, rather than management control.

DR. REISCHAUER: Or effective management, Jack.

DR. NEWHOUSE: It's the other managers that weren't controlling them.

[Laughter.]

MR. ASHBY: I kind of had in my notes predominant influence.

DR. ROWE: Once in a while I wonder why I'm here, and then I find out. I'm glad I'm amusing you guys.

MR. ASHBY: But indeed, that is a mixed bag situation. I guess we're hypothesizing that there's more room for influence on something like your cost growth than there is on something like the location or the size of your hospital and what have you.

Limitations of the study. The most important one perhaps is that the relationship of one variable we might be looking at to margins will indeed reflect the effects of other variables. And consequently, this type of bivariate analysis can only be seen as the first step in analysis and the results need to be interpreted rather cautiously.

We have already begun two different multivariate modeling efforts that will extend what we're seeing today and we thought

we might also consider doing case studies down the line as a way to possibly get at the effects of some of the more management oriented factors that are not easily measured with secondary data sources.

Then a second limitation that's forever in our studies is that the relationships may indeed have changed since 1999. Although, as we go along I think you might really postulate that some of these are patterns that have been there forever and may very well not have changed that much.

Unless there are any other questions on methodology, we're ready to summarize our findings.

MR. MULLER: Glenn, is now the time or later to suggest some other variables? Should we do it later, after the presentation is over.

MR. HACKBARTH: If you're willing, Ralph, what I'd like to do is let Jack get all of his presentation out. I set a bad example by leaping in right at the beginning. Let's let him get his stuff out and then we'll have questions.

MR. ASHBY: In this next chart we have the list of variables that we considered, more or less, generally beyond management control, although the flip side of Jack's point, none of these save possibly your base location is completely outside of management decisions in the longer term.

The first one of these is urban/rural location. We found that hospitals in large urban areas performed better than average and those in rural areas worse. This is a finding, of course, that we remember from our rural report a year-and-a-half ago.

But by the way, by perform better, I mean in this context that they are both more likely to be in the group with the highest margins and less likely to be in the group with the lowest margins.

This finding at least partially reflects the fact that hospitals in large urban areas have access to the higher base rate, and you'll recall that we recommended a year ago that we phase out that differential in base rates. I can add that both the Senate and House bills that are on Capitol Hill right now do include that provision, to implement MedPAC's recommendation, if you will.

Next we looked at hospitals in particularly isolated rural areas, the least populated areas, and found that they actually performed much better than other rural hospitals. It might seem counterintuitive at first blush, but we believe that this is due primarily to the fact that many of these isolated hospitals are helped, in fact, by the existing special payment provisions that are oriented towards rural hospitals. That includes the critical access hospital program which basically just pulls out the hospitals with negative margins from the PPS and therefore pulls them out from the data that we are looking at.

How well these special payments are targeted at the individual level is indeed a subject of debate, but we can at least say that broadly across this group of the most rural hospitals, the payment system is indeed helping them.

Next we looked at some volume-related factors. First, our finding is that there is no relationship between margins and

Medicare dependency, that is Medicare patients as a percentage of total. The average Medicare penetration, which is right around 50 percent, is about the same for all five of our quintiles by margins.

This, indeed, squares with our earlier findings, that actually go back several years, but our earlier findings of a multivariate analysis that found no relationship between Medicare dependency and cost per case.

But of course, we have an adjustment in our payment system that is based on Medicare dependency. And while many of the qualifying hospitals probably do indeed need assistance, all evidence points to the fact that Medicare dependency is not the best means for targeting that assistance.

Then we next looked at low volume hospitals. Here we're looking at low volume across all payers. This is a production function kind of question. The finding here was that hospitals with low volume are much more likely to have low margins. That squares again with our multivariate analysis done for the rural report that found a very high correlation between low volume and cost.

That led us to recommend that Medicare implement a low volume adjustment, and that recommendation was seriously considered in the Senate Finance Committee but it ultimately was not included in the bill that was just introduced a few days ago.

We also, though, found that a goodly number of these low volume hospitals are in the highest margin group, which seems again a bit contradictory. But that is due to the fact that some of the low volume hospitals are helped by existing programs. Existing programs don't target to low volume so some get help and some don't. But those that do receive the assistance are vaulted up into sort of the winning category here. We'll have more on those provisions in a moment.

Next, type of control. We found a clear relationship here. The investor-owned hospitals performed considerably better than voluntary hospitals. Again, this is both at the low and the high end of the spectrum. That's due in part to the fact that investor-owned hospitals have indeed had lower cost growth during the '90s. So we have to assume that there is some link to management of these facilities.

But of course, to sort of amplify on Jack's point again, management actions can mean a lot of different things. They can indeed include real efficiency improvements. They might also involve cutting services in a way that affects access. They might involve cutting staff in a way that affects quality. We have no information here on how this was accomplished, other than through lower cost growth by one means or another.

Then we also note that the government hospitals performed worse than the voluntary. It's really hard to know what combination of management/circumstance/mission types of factors are in play here.

MR. MULLER: That's independent of Medicaid mix? This answer is independent of Medicaid mix, or not?

MR. ASHBY: No, I mean if you mean controlling for Medicaid mix, no, it does not.

MR. MULLER: That's the usual explanation, is they do Medicaid and uninsured.

MR. ASHBY: Right. But it leaves open the question that we're only looking at Medicare payment relative to Medicare costs here. But there are possibilities for carryover, indeed, and we know that, too.

Now we're moving to features of the payment system.

DR. ROWE: I'd like to ask a technical question here. When you are including for-profit, is the margin post-tax?

MR. ASHBY: Yes, I believe the margin would be post-tax because tax is an expense on the cost report like any other expense.

First, we wanted to look here to hospitals receiving IME payments. We did indeed find that hospitals receiving IME payments performed better than average. We have to remember here that this is performing better, higher and higher margins, more likely to be on the high end, less likely to be on the low end, before we even add in the IME payments or the portion of it that is above the cost relationship. They still fare better.

That reflects partially the benefit of this higher base rate we were talking about a more ago. Most major teaching hospitals are located in those areas. And it also reflects the fact that teaching hospitals, again, have had lower cost growth during the '90s.

Now on disproportionate share, we did not find any relationship at all. When you think about it, that's really what we would expect, given that there is very little evidence of any relationship between DSH payments and cost. These deal with revenue issues. DSH is intended to deal primarily with revenue issues. On the cost side here there's no relationship and therefore we see no relationship in the margins, either.

Then we wanted to look at the two primary rural payments, and that is sole community hospital program and small rural Medicare-dependent programs. I wanted to clarify here that we're talking about hospitals that actually receive extra payments from these programs. A far greater number of them qualify for the programs, but they have the choice of the existing PPS rates or the special rate, whichever benefits them the most.

What we found here was the hospitals receiving extra payments were more likely to have the highest margins and were not less likely to have low margins. No difference on the low end, but they were much more likely to end up on the high end. That suggests the possibility of some overcompensation from these programs. And there's at least a couple of reasons to think that that might very well be the case.

One is that both of these programs base the payment on these hospital's own cost in a base year, and the hospitals may very well have had an unusually high cost year that they get to lock in as their base rate.

And then secondly, the point I made a moment ago, that MDH, the Medicare-dependent program, has these hospitals qualifying on a factor that has essentially nothing to do with cost. So indeed, we can simply have some high cost hospitals that happen to have a lot of Medicare patients, and they get the benefit of

these higher rates.

Okay, then we looked at issues related to wage index. First, we found that hospitals that are geographically reclassified perform worse than other hospitals, again at both the high and the low end of the distribution. This is despite a design here that again suggests some possibility of overcompensation. Those in the outlying area, away from large cities, benefit from an average that is pulled up by the large hospitals in the core city that might be 70 or 100 miles away from them.

But we have to remember that most of these are rural hospitals and they probably have other disadvantages that we see in some of these other variables. And also, that this reclassification category includes not only reclassification by wage index, but reclassification for the large urban-based rate. And the rather strange feature of that provision is that the main thing a hospital has to do to qualify for that extra payment is to have high costs. That's what they have to do to show that they're a high cost hospital.

So we should not be surprised to see that high cost hospitals end up in this group and therefore have lower margins. That's exactly what we see.

Then on the wage index itself, prior to reclassification there's very little relationship between margins and wage index value. And after we account for the movement due to reclassification, there's virtually no relationship at all between wage index level and financial performance.

And that despite a wage index system that ranges from .7 all the way up to 1.5. We found all five of our groups within a couple of percentage points of each other. There's virtually no relationship. And that supports the conclusion that we made in our June report, that there really is no need for a wage index floor that would indeed give very large payment increases to those hospitals in the low market areas.

Lastly, we're going to move to factors that, at least to some extent, appear to be within management control. This is the list. We'll start out with service mix.

The theory behind why we would think that hospitals offering post-acute services themselves would have something to do with financial performance on the inpatient side is that first it allows the hospitals potentially to discharge their patients earlier simply because it's a little easier to arrange it down the hall than it is to arrange a transfer to the next county or something.

But also because it gives them the opportunity to allocate costs out to these post-acute services, therefore reducing the costs that are carried over on the inpatient side.

But our finding, in fact, was that there's very little evidence of relationship here. The hospitals offering SNF or home health were only slightly less likely to have low margins and virtually no difference on the high side. As far as offering inpatient psych or rehab, there's a little bit more of a difference on the low end, but still nonetheless the general picture is not much action on these variables.

For outpatient services, we did find that the hospitals with the lowest margins do indeed have much more outpatient care, a larger proportion of their resources devoted to outpatient care. But we really doubt that there's a cause and effect here.

Many of the small rural hospitals do proportionately have very large outpatient operations but I would tend to suspect that the problem really is the very small scale of their inpatient operation that is causing them the financial trouble for inpatient payments.

Lastly, we have the three variables that at least have the potential for significant management influence. I think the word influence does look better up there than control, but at least some potential for management influence.

First, we found a strong relationship to occupancy rate. Lower margin hospitals do indeed have low occupancy and vice versa. Same situation with the decline in length of stay. Now just to sort of set the landscape here, all hospitals had very large declines in length of stay during the '90s, but the low margin hospitals were able to reduce their length of stay to a much lesser degree than were the higher margin hospitals.

But then the strongest bivariate relationship of any of the variables that we looked at was between margins and the 10-year change in Medicare cost per case, which is to say quite simply that those that controlled their costs are the ones that are doing well today. Those that did not control their costs are doing poorly today. It's pretty much as simple as that.

Of course, one of the ways that you control your costs is through reducing your length of stay. But since the effects of differences in the cost growth were much greater than the effects of differences in length of stay, we have to surmise that there is something going on here beyond manipulating length of stay. We don't really know why there is such a huge range in cost growth. This really is a very large difference between the high margin hospitals and the low margin hospitals here. But the finding does indeed suggest that there is plenty of room for influence for the hospital's own management decisions.

Because we really know why there is this huge difference in cost growth performance, which leads to financial performance differences, the next step that we intend to take in this analysis will be a multivariate analysis in an attempt to identify the factors that are correlated with these differences in cost growth. Craig Lisk will be reporting on that analysis at an upcoming meeting.

MR. HACKBARTH: Until we do that we really do need to regard these results as quite --

MR. ASHBY: Fairly preliminary, right. We're kind of at the hypothesis-forming stage, as it were.

MR. MULLER: The inpatient margins, as I've said for quite a while now, always attract a lot of attention. I notice it already hit the trade press yesterday around the country. So it gets out there pretty fast, despite that they might be hypotheses.

Jack, if I could make a suggestion on the management influence ones. In the same way that maintaining cost control

maybe, as you say, is a good indicator of where the margins may be, some form of revenue control I would hypothesize would come from perhaps looking at the proportion of DRGs and the higher weights for some kind of case mix index, probably even more than case mix index, which is more of a continuous function, perhaps looking at the proportion that are more than a certain weight. Certainly, we're seeing the kind of specialty hospitals going up, I think, in the DRGs that have higher weights and so forth.

So one of the things, if it's not too hard, you may want to look at is the extent to which hospitals concentrate their services in the kind of higher weight DRGs and see what that's a measure of. I would hypothesize that's a measure of revenue opportunity and growth and therefore would lead to margins.

So either looking at the case mix index or looking at some proportion by high DRGs might be a good thing to look at.

The second thing is, it just goes back to the comments, to always look at the inpatient and outpatient in some kind of concert, I think is an appropriate thing for us to keep looking at. I understand your point about the inpatient margins being worth analyzing in and of themselves, by and large, since as we discussed last year, there's such a depressing effect from the outpatient margins on the inpatient margins. These numbers of 20-plus get a lot of attention. So I think having them in some kind of concert usually makes a lot of sense.

Thank you.

MR. ASHBY: It's kind of a frustrating situation because pointing out how high some of these hospital's margins was not the purpose of today's session. We're trying to get at why there are such differences across the distribution. But nonetheless, that's what some folks notice.

DR. NEWHOUSE: I'm going to wind up suggesting a more radical hypothesis but let me start with a question. Have you, Jack, computed these margins for a multi-year basis? That is say over a three or five year period?

MR. ASHBY: Let me first of all say that I missed a point that I intended to stress, and that is that these margins are already two year margins and we used the two-year margin rather than the one-year margin under the theory that it would help us a little bit in avoiding the effects of perhaps data anomalies, but also just one-time factors that might affect it.

We really wanted to go farther than even a two-year and look at a longer period, but our fear in doing that is that with us constrained with only having '99 data in the first place, you go back very much further than that and you get into a time when the world was really different. '97 and before we had, first of all, much higher margins. A whole lot of cuts had not gone into effect yet. And we thought that that would contaminate things to go back that far.

DR. NEWHOUSE: Let me put forth my hypothesis and then say that computing margins over several years would be a weak test of it. One of the implications is besides multi-year, would be to also look at most of Medicare.

The hypothesis I want to put forward is that some amount of this variation is basically attributable to a variation in

accounting policies. And that this discussion has tended to treat it as real and it may not be real.

One example to keep in mind that's too extreme for this probably is the variation in the direct medical education payments, which is basically all attributable to variation in accounting policies in 1984. That's an extreme amount of variation.

MR. ASHBY: That would be on the GME payments.

DR. NEWHOUSE: Direct medical education payments.

MR. ASHBY: Yes, the direct medical education.

DR. NEWHOUSE: But beyond things like revenue recognition, treatment of depreciation and so forth, how hospitals allocate overhead to the inpatient unit versus to the other units could well vary. That could be stable. The reason I wanted you to go to multi-year was that if this variation persists on a multi-year basis, it suggests that it's -- first of all, it suggests that it may not be real, because how are these hospitals with big negative margins managing to survive. And second of all, it is consistent with a variation that's stable over time in accounting policies.

Beyond how you allocate your overhead to the inpatient unit versus the other units in the hospital, which could vary, I think Ralph let you get away too easily with the answer on Medicaid and uninsured, that if this was only the Medicare margin --

MR. ASHBY: It gets back to the allocation question.

DR. NEWHOUSE: Absolutely. I mean, the rest of the patients, we know that, for example, nursing time just gets allocated on a per diem basis, but the true costs could well vary and presumably do vary. That's again basically an artifact of these numbers then, in terms of the variation.

The final point I wanted to make was on the control issue. There are different incentives in accounting in the for-profits. It even goes to your point about the control of costs. Because the accounting, you were treating that as real. The hospitals that were controlling their costs better were showing better margins. But if the control of cost is something of an artifact of accounting policy, then it's going to turn into an artifact in the margin.

Now I don't know that it is an artifact and I'm not implying that most all of this is an artifact. It may not be. But I think we have to entertain the hypothesis that some amount of this, and it may well be a non-trivial amount, is just an artifact of how the hospital does its accounting.

As I say, I think you can minimize some of that by going to most of Medicare and away from inpatient. And I think that if you see much of this variation persisting over time, and particularly if you see the hospitals with negative margins persisting over time, then it suggests that it's probably not real.

MR. ASHBY: Right. The one thing that I can say about over time is that we were kind of interested in the question of whether the variation has increased over time. But in fact, it has not. The standard deviation of these margins in 1991 is almost exactly the same as the standard deviation in 1999.

DR. NEWHOUSE: No, that's not what I mean by over time. By over time, taking the margin over a 10-year period, not how it changed between '91 and 10 years later. But if I took a much longer period than two years, how much variation would I see across hospitals?

MR. ASHBY: Yes. It's a difficult trade-off. Like I said, we really wanted to go to a longer period of time but our fear was that we have other things going on during that same period of time and the world really changed rather dramatically. The accounting factors, of course, are one of the things that may have changed but unfortunately there's a world of other things that changed, too.

DR. NEWHOUSE: They may not have changed and yet you still have this kind of variation.

DR. ROWE: A couple things. On unnumbered page number eight where we have urban/rural location, I think we might want to change the first line, if I understand the first bullet, to say hospitals in large urban areas performed better than average while those in rural areas performed worse, except for those who don't. Because what you have done is excluded the hospitals that are taken out of the PPS because they perform badly. And they get corrected to immunize them.

And if you threw them back in they, of course, perform better than average.

MR. ASHBY: No, they wouldn't perform better than average. They're brought to zero.

DR. ROWE: They're brought to zero. But that changes. Unfortunately, I'm not sure whether you intend this to be an analytical document. Some people might see this as a political document. And I think that, to be fair, this statement neglects those populations that are immunized from being negative and there are already these programs out there, the sole community program, Medicare-dependent hospitals.

So I think that we need to correct this somehow.

MR. ASHBY: So the suggestion is that perhaps we should have left the CAH's in.

DR. ROWE: Yes. That's my point.

DR. MILLER: And in the multivariate analysis you can actually model it as a variable in order to control for its effect, put it back in the database.

DR. ROWE: Yes. Or you could say that for all hospitals, those in large urban areas, et cetera, et cetera. And then you can say for those hospitals that are not included in special programs -- or something like that. But somebody will pick up -- I wouldn't suggest anyone here would do that. But somebody might use that statement in a way it's not intended.

MS. BURKE: Jack, I'd suggest using a term other than perform because it indicates that they're doing something that essentially gets them what they get, which is not the point of what you're saying. The point is the results are different and their margins are better in one than in the other. It's not a question of performance, per se. People will view that word as a code for something.

DR. ROWE: Then the next page, the second bullet talks about

hospitals with low patient volume and you get, much later, to the issue of occupancy. I think that there needs to be a closer linkage throughout this of volume and occupancy and length of stay. And there needs to be an analysis of the intersection of those. Let me just talk about that for a second.

Occupancy is obviously more important than volume. If you have a small hospital that's 100 percent full, it's much more likely to be doing well -- let's say 100 bed hospital that has 100 patients, than a 200-bed hospital with 100 patients. They both have the same volume, one has much better occupancy.

But the other point about length of stay relates to the backfill phenomenon. For instance, there is less pressure to reduce your length of stay if your occupancy is low. If you have 100 percent occupancy and you know that as soon as a patient leaves another patient will come in and there will be another, in the case of Medicare, DRG payment, then there's a great emphasis to reduce the length of stay and move the patients through.

But if you have no pressure, there are many payment systems from private payers where you get a per diem. So you get nothing for an empty bed. And if the patient stays in the bed you get something. So that reduces the pressure on the length of stay. And it's hard to have a hospital that has one set of length of stay initiatives for the Medicare beneficiaries and another set for the non-Medicare. You can't really do that.

So there needs to be at least some discussion of the relationship and the dynamics between occupancy, volume, and length of stay. So that people get an appreciation for how these might interact.

Nick runs hospitals and Ralph ran big hospitals, and there may be other points of view here, but I think that that would be informative, just to have some stuff about that.

MR. ASHBY: But I want to point out, though, even with an empty hospital, all else being equal with respect to management here, they're still going to benefit from cutting length of stay. There may be opportunities to reduce the --

DR. ROWE: I agree with you, Jack. I just think there's an additional layer of sophistication here we can include.

The last point I would make is about the availability of post-acute care services being under management's influence. I think that is, in many areas, a regulatory issue. Management might wish to have post-acute care services but you can't get approval for additional SNF beds in a given area because there's an excess of them or whatever. There are a number of regulatory issues. There may even be labor relation issues in some areas, where there's a union for long-term care facilities but the given hospital doesn't have a union.

I mean, there are all kinds of issues which may not be so easily managed by the executives.

MR. ASHBY: We saw in management prerogative, in terms of closing post-acute care units. I mean, we had a bunch of them close in earlier years. But on the opening side, I guess you're saying it's not a parallel --

MR. MULLER: Just briefly, we also know from our data last year that nursing homes that are largely Medicaid have dreadful

margins, minus 70 or something like that. So you're not going to built a lot of nursing home beds that are in areas that are Medicaid because they're minus 50 percent margins. So that, in a sense, is to add to Jack's point. It's just not going to happen, high Medicaid areas won't have as many beds.

MR. SMITH: A couple quick points, Jack. Much of what I wanted to say has already been said. But I did find the distinctions that were made on control/lack of control unsatisfying in a lot of ways. For some of the reasons Jack just mentioned, Ralph's earlier point about Medicaid-avoidance. Even the decision to stay open, you suggest that location is something which is fundamentally out of location's control. Well, when you think about the open/close decision, it's fundamentally within management's control.

So thinking more about the subtlety and complexity of what management can and can't control and the ways in which it's constrained would be helpful.

I want to remake the point that Bob made and that Bob and I make almost all the time. Bed weighting this stuff would help. One hospital, one vote is not a very good way, it seems to me, in looking at the distribution of margins or much else. And if we could get some bed-weighted versions of that, I think that would be helpful.

MR. ASHBY: In most of our work we almost invariably use aggregates that are revenue weighted, is what they are, as opposed to bed weighted, but the same thing. That tells you something about where the dollars are and that's ultimately what we almost always care about.

But in this context somehow it seemed like the non-weighted approach had some merit because we're really interested in each hospital as an operating entity, as opposed to the flow of dollars in the program.

MR. SMITH: Actually it was sort of the converse of that that led me to wish to see this bed weighted. I don't disagree, and we spend a lot of time -- as does Congress -- thinking about hospitals as teach hospital as an important entity, whether or not we create a special designation for them.

But it would be useful to know that instead of talking about 20 percent of the hospitals we're talking about 6 percent of the beds, or the other way around, in helping us think about how we should set our priorities as we approach this work.

And lastly, I want to underscore Jack's point. It seems to me the variable here that really matters is occupancy, not volume. Perhaps it isn't, and it would be useful to look at that relationship and try to make sure we understand whether or not low volume by itself is the predictor of poor performance that this suggests, or whether it's low volume which turns out to be a proxy for low occupancy. I have a guess about that, but it would be useful to have a bit more information.

MR. HACKBARTH: Could I go back to the weighting issue for a second? Is it an either/or question? Or maybe we ought to be looking at both. The reason I think that having bed weighting or revenue weighting or something would also be a good take on this is that it's commonplace now for people to argue for more money

for hospitals, saying 50 percent of all hospitals are losing money. And at one level that may be a relevant statistic. But it also may be relevant to know that those 50 percent of the hospitals represent 10 or 15 percent of the beds. So I think both cuts could shed light on the problem.

MR. SMITH: I didn't mean to substitute one for the other, but to bed weight use would be additional useful information.

MR. ASHBY: Yet a couple of the other considerations on that question are whether the 15 percent really play some critical role in access to care. That's one important question, regardless of how many dollars they have.

The other is whether the reasons why they're performing, or whatever we're going to call it, why their result is so poor, really are due to some factors that they might have had a chance to do something about. Should we give them out just because they are at the low end of --

MR. HACKBARTH: That's the basic reason for trying to untangle this web, is to shed light on that question. Maybe they ought to be losing money and it's not a matter of great concern.

DR. WAKEFIELD: Jack, I'd just say I'd certainly agree with the point that Jack made earlier about the urban/rural location chart and the washing out of differences. One would think that, at least hypothetically, it helps to put some precision around certain categories to inform policy. So to the extent that we've got specific categories broken out rather than casting that more general at all rural areas, using that just as an example, it's always really helpful for me anyway to see it broken out by categories, which you've actually done as you were kind of walking through this in different areas. You spoke to Medicaredependent hospitals, sole community, et cetera, et cetera.

So that's really valuable. And I think it helps all of us be a little bit more precise in terms of how we're looking at impact of payment policy.

The question I have for you is on the inpatient Medicare margin chart. I'm sure there's an obvious reason for this and it's going to embarrass me by even asking it because it's going to be such an obvious answer. Is there a reason why you didn't mirror the non-DSH categories by large urban, other urban, and rural areas?

In the chart that you showed us up here we've got just urban and rural, in the narrative we had large urban, other urban and rural, and there were some differences in the narrative chart. So that other urban came out of this one. That's just an observation.

But the real question is is there a reason why you didn't break down the non-DSH, where the figures are just a little bit different? Non-DSH is 6.9 up here, it was 6.7 in the table in the narrative. That's not the issue for me, though. Was there a reason why you didn't break out non-DSH by large urban, other urban, and rural, as you did with DSH?

MR. ASHBY: No. The answer is there's no good reason other than that's the way we've generally done it and so those are the numbers that were sitting in front of me. Very unsatisfying answer.

We might, in fact, want to look at that.

DR. WAKEFIELD: Would you mind doing that?

MR. ASHBY: Yes.

DR. WAKEFIELD: I'd be interested to see how that would vary across those three categories. Thank you.

MS. ROSENBLATT: I have a question on three other variables that may or may not be linked to variables that you've already considered, so let me put these out as questions.

The first would be the number of hospitals in a given area, within a certain number of miles, which may or may not be related to urban/rural. But do you think there's a big difference between a one-hospital rural town versus a three-hospital rural town?

MR. ASHBY: Yes, a degree of competition sort of variable.

MS. ROSENBLATT: The second one would be we're looking at each hospital individually, but some hospitals might be part of a large system. I think of the Sutter system, for example. Now that may be linked to your type of control, investor-owned versus non-investor-owned. But I don't know if that would be worth looking at.

And then the third one is the amount of uncompensated care or the uninsured percent in the local area, which again may or may not be linked to the DSH payment. But it would seem to me that hospitals that have a lot of uncompensated care may be the ones with the low margins.

MR. ASHBY: Right. Let me give you a couple of answers to that. The degree of competition, we think, is a very important parameter and we're taking steps already to try to get that into our multivariate analysis that will follow. We just couldn't pull it off in short-term for this.

Unfortunately, it's the same answer on the uncompensated care. I really wanted to have that here, but we don't have the data available to us. Uncompensated care is being added to the cost report this year, so at some point we will have it. But we don't today.

MS. ROSENBLATT: Would uninsured percent for the community be worth -- is that available?

MR. ASHBY: One would think there would be some correlation there. That's a possibility.

DR. REISCHAUER: What would the correlation be the Medicare margins? Because I would think if you had a lot of uncompensated care you'd run a cheap hospital, probably, so your margin in Medicare would be high.

DR. ROWE: Or you'd be a city hospital and your deficit is made up by the city of New York. So you wouldn't run a cheap hospital. In other words, you'd be a city hospital and you'd run an expensive hospital with a lot of labor force issues, et cetera. And then the city makes it up at the end.

MR. MULLER: A lot of the uninsured are in the -- I want to call them the low DRGs, for which you don't get paid very much. But it doesn't perfectly reflect costs of what you often find in the public indigent hospitals is because their case mix is not as high. They do a lot of babies and other kinds of medical versus surgical cases. They tend to have low payments across the board,

not just in Medicare, but higher costs that aren't reflected by the case mix indices. So you wouldn't find high Medicare margins.

DR. REISCHAUER: But it's not affecting the Medicare payment. The Medicare payment is set administratively.

MR. MULLER: No, but they tend to have a case mix that's in the low part of the Medicare weights, and therefore you don't get much margin on it.

DR. REISCHAUER: The Medicare case mix is low?

MR. MULLER: Yes.

DR. REISCHAUER: Because a lot of Medicare people are having babies?

MR. MULLER: No, because they have more medical versus surgical cases. Surgical cases are the high ones, high DRGs on which you make margins.

MR. ASHBY: But uncompensated care is not what's causing it. It's kind of a useful cross-correlation, I think, is what Ralph is pointing out here, of other factors.

MS. BURKE: Unless it's a teaching hospital.

MR. MULLER: City hospitals, by and large, have very low case mix indices.

MR. SMITH: But for the Medicare population?

MR. MULLER: Medicare as well, because they have more medical cases than surgical cases, by and large. A lot of their Medicare cases are people who age up from Medicaid. And therefore they have multi-system failure, but they tend to have low case weights. That's why you see this correlation of high cost and low payment. I'll bet you the government-owned hospitals in this country have low Medicare margins.

MR. HACKBARTH: I'm going to ask that we move ahead. Sheila is going to have the final comment. This is complicated stuff. We could talk about it almost without limit, I think, but we need to have one.

MS. BURKE: One point, one question. The point, which I'm sure you've already thought of, is when the time comes and any of this becomes officially public, there will be an enormous amount of interest in knowing who's at the bottom and who's at the top, quite specifically. Who's in that minus 18 and what that actual distribution looks like around types of hospitals and geographic location.

Having done some carve-outs in my life, I can assure you that that will be the case. So we should be thinking about what we say about that.

But the question that I had, and this goes back probably too far, and is embarrassing in that context, it takes me back to sort of pre-233 limits. To what extent do we think or believe at any point size -- all these other things, in some cases, are proxies for size. Is size again an issue for us? Do we know whether there is, in fact --

MR. ASHBY: This gets back to the relationship between occupancy and volume here. We were, in essence, attempting to measure size with case volume here. But there is bed size, as well, that has a different parameter to it, unused capacity.

MS. BURKE: Again, it's something we discarded when we sort

of moved away from that model. But really there are really behavioral differences based on the size of the institution, not only its geographic local, urban/rural. Some of that is a rural proxy for small hospital.

But whether or not overall -- and volume will pick up some of that. But whether or not we again look at comparative groups that are literally by size of facility. Whether that has any impact.

MR. ASHBY: Bed size.

MS. BURKE: Bed size, today. I don't know. We haven't thought about it in years and it may not make any sense at this point.

MR. ASHBY: Somehow I have a suspicion that we would see a similar pattern to what we see measured as case volume, which is the very small ones, indeed, have higher per unit costs. And it goes down as you move up. Except that when you get to the very high scale it no longer goes down. The really large city hospitals begin to pick up other kinds of problems, including some of them that Ralph talked about.

MR. MULLER: Just one more brief technical point. Last year we talked about that we might look at the cost that are not on the cost report. I remember you estimated that could be 3 or 4 percent. Are we going to have any chance to look at that this year?

MR. HACKBARTH: It's not on the agenda right now.

MR. MULLER: Because 3, 4 percent can make a difference.

MR. HACKBARTH: We're going to have to bring this to a conclusion. As good as Jack is, there's probably no way we'll be able to have the definitive answer to all the many questions.

I think we will have made a contribution, even if we can only answer some much more basic questions. I've had several people look at that graph that Jack showed at the beginning, and the wide distribution of margins, and say this by itself is a prima facia case that the system is broken, when so many hospitals are losing money and there's such a wide range between the best performing and the worst performing.

I'm hopeful that, at a minimum, this analysis can shed light on those questions. I don't think that it is a prima facia case that the system is broken and I think this will help us lay that out.

We've got to move ahead to access to care. So this is a continuation of the discussion we began at the last meeting. For those of you in the audience, and commissioners as well, we're trying to put together a system that will allow us, on a regular basis, to monitor what happens to access to care for Medicare beneficiaries.

Karen, whenever you're ready.